

West Virginia Vectorborne Disease Surveillance Report

FOR THE PERIOD: SEPTEMBER 8-14, 2012



The purpose of this report is to share descriptive surveillance data related to vectorborne disease activity with public health partners in West Virginia. All information in this report is considered provisional. For questions or comments, contact Rachel Radcliffe (Division of Infectious Disease Epidemiology) at rachel.radcliffe@wv.gov

Mosquito-borne disease surveillance summary

Human Surveillance: During the period September 8 - 14, 2012, no human cases of La Crosse encephalitis virus and no human cases of West Nile virus were detected in West Virginia. Additionally, 5 possible La Crosse encephalitis cases and 14 possible West Nile virus cases are currently under investigation.

Table 1. Summary of human cases of mosquito-borne diseases for the current reporting period and 2012 (cumulative) – West Virginia

Mosquito-borne Disease	# Confirmed or Probable Human Cases ^a		Comments
	Sept 8-14, 2012	Total 2012	
La Crosse infection, human	0	10	5 cases are currently under investigation
West Nile virus infection, human	0	3	14 cases are currently under investigation
Other mosquito-borne infection, human	0	2	All cases are travel-associated malaria infections

^aNote: Table includes only confirmed or probable cases that have been reviewed and closed by Division of Infectious Disease Epidemiology staff

Mosquito surveillance:

Table 2. Summary of adult mosquito surveillance for the current reporting period and 2012 (cumulative) – West Virginia

Mosquito Species	Current (Sept 8-14, 2012)					Total 2012					Comments
	# Pools Tested	+ Arbovirus ^a				# Pools Tested	+ Arbovirus ^a				
		W	L	S	E		W	L	S	E	
		N	A	L	E		N	A	L	E	
		V	C	E	E		V	C	E	E	
Culex spp.	37	9	-	-	-	247	28	-	-	-	
Non- Culex spp.	22	18	-	-	-	278	155	-	-	-	
Total	59	27	-	-	-	525	183	-	-	-	

^aMosquito pools testing **positive** for arboviruses.

WNV=West Nile virus; LAC=La Crosse; SLE=St. Louis encephalitis; EEE=Eastern equine encephalitis

Note: The West Virginia Department of Health and Human Resources mosquito surveillance program has collected mosquitoes from the following counties: Boone, Cabell, Clay, Fayette, Harrison, Kanawha, Mercer, Nicholas, Putnam, Raleigh, Roane, Tyler, Wayne, Webster, and Wood counties. West Nile virus has been found in mosquitoes from all counties under surveillance except Tyler County. Arboviral screening will soon be conducted on mosquitoes recently submitted from Braxton County. New collaborators may submit mosquitoes from the eastern panhandle within the coming weeks.

Bird and Horse Surveillance:

Table 3. Summary of surveillance specimens submitted for dead birds and horses for the current reporting period and 2012 (cumulative) – West Virginia

Type of Specimen	Current (Sept 8-14, 2012)				Total 2012				Comments
	# specimens tested	+ Arbovirus ^a			# specimens tested	+ Arbovirus ^a			
		W N V	S L E	E E E		W N V	S L E	E E E	
Dead Bird	2	-	-	-	12	-	-	-	5 specimen tested negative for arboviruses; 6 specimens pending; 1 sample count not be analyzed
Horse ^a	0	-	-	-	1	-	-	-	Specimen was negative

^aNote: horse specimens are tested for WNV and EEE only.

Tickborne disease surveillance summary

Human Surveillance: During the period September 8-14, 2012, no human cases of Lyme disease were detected in West Virginia. The cumulative total of human Lyme disease cases for all of 2012 is 45. No human cases of Ehrlichiosis, Anaplasmosis, Babesiosis, or RMSF have been confirmed in West Virginia during 2012.

Table 4. Summary of human cases of tickborne diseases for the current reporting period and 2012 (cumulative) – West Virginia

Tickborne Disease	# Confirmed or Probable Human Cases ^a		Comments
	Sept 8-14, 2012	Total 2012	
Lyme disease, human	0	45	
Rocky Mountain spotted fever ^b	0	0	
Ehrlichiosis, human	0	0	
Other tick-borne infection, human	0	0	

^aNote: Table includes only confirmed or probable cases that have been reviewed and closed by Division of Infectious Disease Epidemiology staff

^bIncludes all spotted fever rickettsioses

Tick Surveillance:

No update

CUMULATIVE VECTORBORNE SURVEILLANCE SUMMARY TOTALS (JAN 1 2012 – Sept 14, 2012)

County	MOSQUITO-BORNE									TICK-BORNE (human)			
	LAC ^a , human	WNV ^b , human	Other, human	WNV, equine	Other, equine	WNV, avian	Other, avian	WNV, mosquito	Other, mosquito	Lyme disease	RMSF ^c	Ehrlichiosis	Other
Barbour													
Berkeley										30			
Boone	1							1					
Braxton													
Brooke													
Cabell								67					
Calhoun													
Clay	2							1					
Doddridge													
Fayette								22					
Gilmer													
Grant													
Greenbrier													
Hampshire										3			
Hancock													
Hardy													
Harrison								4					
Jackson													
Jefferson										5			
Kanawha	1	1						22					
Lewis													
Lincoln													
Logan													
McDowell										2			
Marion													
Marshall													
Mason													
Mercer	2							3		1			
Mineral													
Mingo													
Monongalia													
Monroe		1											
Morgan										4			
Nicholas	2							16					
Ohio													
Pendleton													
Pleasants													
Pocahontas													
Preston													
Putnam								1					
Raleigh	1							3					
Randolph													
Ritchie													
Roane								7					
Summers													
Taylor													
Tucker													
Tyler		1											
Upshur													
Wayne								15					
Webster								6					
Wetzel													
Wirt													
Wood								15					
Wyoming	1												
TOTAL	10	3	0	0	0	0	0	183	0	45	0	0	0

*Note: Table includes only confirmed or probable cases that have been reviewed and closed by Division of Infectious Disease Epidemiology staff

^aLAC=La Crosse

^bWNV=West Nile virus

^cRMSF=Rocky Mountain spotted fever (includes all spotted fever rickettsioses)